# The Anchorage Amateur Radio Club News Bulletin

August 1997

Editor - Harvey E. Rookus NL7DK

Vol 26 No 8

**General Meeting** 

August 1st 7:00 pm

Come and See what

**Peter Bailey** 

Has lined Up for

Us

He has Always Had a

Good Program!

New AARC Website

http://nl7nc.akconnect.com/aarc.htm

#### What's Up?

General Meeting First Friday of Month - Carr-Gottstein Bldg APU Campus 7 pm Second Bldg on the left. Room 102

Board Meeting - Second Wednesday 7 pm - Grant Hall APU Room 150

VEC Testing - 1st Wed 6:30 pm, Carr-Gottstein Bldg.;2nd Saturday, 2 pm Hope

Cottage - 530 W. International Airport Rd. Enter Rear of Bldg.

3rd Wednesday, VFW Hall - Eagle River 7 pm

No appointment needed. Bring copies of previous testing. Bring Photo ID. Second Friday SCRC general meeting 7 PM Room 220 Bus Ed Bldg UAA

#### THE ANCHORAGE AMATEUR RADIO CLUB'S 26™ ANNUAL

### **HAMFEST 1997**

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#### ALASKA'S LARGEST ELECTRONIC HAMFEST-

TRANSMITTERS, RECEIVERS, COMPUTERS, ANTENNAS AND OTHER ELECTRONIC AND RADIO EQUIPMENT

VEC TESTING, FCC COMMERCIAL LICENSE EXAMS, AK QSL BUREAU, MARS, CAP, ARES, COUNTRY STORE, ARRL INFORMATION AND REPRESENTATIVES, BANQUET (SAT EVE.), FOOD BOOTH, GOOD TIMES AND FRIENDSHIP

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# GUEST SPEAKERS: GORDON WEST WB6NOA AND RICK PALM K1CE (ARRL FIELD

SERVICES DIRECTOR)

DATE: SATURDAY AND SUNDAY, SEPTEMBER 20TH AND 21ST.

TIMES: SATURDAY 10AM TO 5PM.
SUNDAY 8AM TO 4PM

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LOCATION: KINCAID PARK OUTDOOR CENTER AND SPORTS CHALET

DIRECTIONS: FROM FOUR CORNERS (JEWEL LAKE AND RASPBERRY ROAD) TURN WEST ON RASPBERRY ROAD AND GO ALL THE WAY TO THE END UNTIL IT MEETS THE SEA. TALK-IN ON 146.34/94 (PL 141.3 OR 100)

For tables, contact Rob Wilson AL7KK at 907-248-0976. Ham table fees have been reduced to the 1990 rates, \$10.00 per table + 10% of sales. Commercial tables are a flat rate of \$35.00. Admission: 3.00 for adults; 2.00 for ages 13 to 17; 12 and under free. Country store items will be charged 20% of sale price.

#### NOA's ARC

I don't know about some of you younger hams, but I, NL7DL, do often like my creature comforts when I am operating on the radio. I think many of you older hams will understand this. However, I think that Gordon takes operating in comfort and style several steps above what I could ever do. Following is an article from W5YI newsletter that explains how he does this:

Gordon West WB6NOA (Costa Mesa, California), has a new "NOA's ARC." West's new Amateur Radio Communications vehicle is built around a Chevrolet 22' G30, 1-ton extended van chassis with a 7.4 liter 454 CID EFI V8 gas engine. A 4.5 KW generator is installed beneath the rear radio operating area to provide plenty of power for all amateur radio equipment onboard.

Every manufacturer of amateur radio equipment is represented. There are three operating positions inside the vehicle-the front for HF, mid-section for VHF/UHF and the rear area carries satellite and data equipment.

"We have 160 meters through 10 Ghz, and every manufacturer has at least one operating unit," comments West. "This will allow students to enjoy 'hands on' exposure to every radio brand sold through dealers or direct. The vehicle will also serve as an emergency communications vehicle for our local Red Cross chapter, plus emergency communications to the city of Costa Mesa," adds West.

The picture below, which was sent to me by Gordon, shows Gordon's RV before the antennas were added. Picture in your mind the description of the locations of the radios in the above article and I think you might have a good idea of where you would see the antennas. Gordon has made me break the ninth commandment again- the one that says thou shalt not covet thy neighbor's RV with radios. I hear that Sue N6GLF does the driving while Gordon does the fun part-the operating. Maybe if Sue is good, she gets to take a break and do some operating herself.

Make plans to attend the AARC Hamfest September 20 and 21, and learn more about NOA's ARC.



## Gordon West-Ham Instructor Par Excellence

If you have ever considered teaching amateur radio classes, who would you talk to for ideas on presenting an outstanding and interesting class? Rick and I were lucky in that capacity.

We had been teaching amateur radio classes, but wanted some ideas for better demonstrations and presentation of the lessons. We had met Gordon West twice before, and on our second visit to his home, he was kind enough to invite us inside. While there, we mentioned that we taught amateur radio classes. Gordon was planning to teach an amateur radio weekend-class that very next weekend, and he invited us to audit the class. We were delighted, and we gladly accepted his invitation.

The class we attended was held in one of the large fancy meeting rooms of a hotel. There must have been about 30 to 40 students, including several foreigners (mostly Asian) whose mother tongue was not English. All of the students were required to pre-read his license manual before attending the class. And then came the fun part, and I do mean fun!

We found Gordon to be a captivating teacher. His presentation of the material was done in a active, vivacious manner that enabled his students to learn the material in a fun and interesting way. His demonstrations were presented in such a lively fashion, that the students could see and understand the subject. From Gordon, Rick learned the technique of demonstrating how radio waves bounce off of the ionosphere (Gordon used a blue smerf ball and simply bounced it as he spoke and explained the subject.) I clearly remember Gordon's demonstration of line-of-sight operation. He shot a mild laser beam light across the room. At first the beam of light was invisible. But as Gordon explained the way line-of-sight works, he clapped two blackboard erasers along the invisible beam and gradually a beam of light became clearly visible in the eraser dust. I could physically see what he was explaining.

During the lunch intermissions, we had opportunities to tell Gordon some of the procedures we used in our own classes. We found that he listened with enthusiasm and a great deal of interest. I think Gordon likes to take other people's ideas and figure out how to incorporate them into his classes.

We were given an opportunity to get up in front of Gordon's classes and tell some of our experiences while operating during the Iditarod race. I like to think that we helped to teach his students our foolproof way to get bashful hams to talk to you on VHF while you are driving along the highway in another state. (If anyone is interested in learning this secret, ask us next time you see us.)

From beginning to end, for two and a half days, Gordon's classes were packed with information and learning, fun and activity. His students ate, slept, dreamed, played and studied amateur radio and nothing but amateur radio. At the end of the session, the students were given novice and technician VEC-coordinated exams, which I attended. Though I don't remember the exact number of students who passed, I do remember that the vast majority of them passed the exams with ease on the first try.

Based on what Rick and I observed of Gordon's weekend class, we know for a certainty that Gordon will be a fun and captivating guest speaker for our Hamfest (September 20th and 21st.) This should be a don't miss event for Alaska hams, and Rick and I will be there in the front seat for Gordon's presentation.



July 1, 1997

Mr. Robert Wilson, President Anchorage Amateur Radio Club, Inc. P.O. Box 101987 Anchorage, AK 99510-1987

Dear Mr. Wilson:

Thank you for your generous donation to the Anchorage Senior Center Endowment Fund. Please convey our sincere thanks to your members who voted to donate \$1,000 to this Fund.

As you may know, it is the goal of the Trustees to make the Center more selfsupporting in the future and this can only be accomplished by donations such as yours.

The Board of Directors, staff and members join me in thanking you. We are most appreciative that you thought of the Center's Endowment Fund for this special donation.

Sincerely,

Clara (Billie) Lewis

Clara (Bicie) Lewis

**Executive Director** 

#### $A \cdot P \cdot T \cdot I$

Alaska Public Telecommunications, Inc. 3877 University Drive Anchorage, Alaska 99508 Telephone (907) 563-7070 Fax (907) 273-9192

June 27, 1997

Robert Wilson, President Anchorage Amateur Radio Club P. O. Box 101987 Anchorage, Alaska 99510-1987

Dear Mr. Wilson:

What a wonderful surprise to receive a \$1,000 gift to KAKM from the Anchorage Amateur Radio Club!

We have just completed the preparation of our FY98 budget, and your contribution to quality programming is especially appreciated. We are cutting costs everywhere we can that WON'T impact programming. Knowing that the community recognizes and supports that effort is a real morale booster to our staff.

Please express our appreciation to the members of your club. If they would be interested in a tour of KAKM and the new KSKA studios, now located here, we would be happy to arrange it. Call me anytime.

Sincerely,

Susan Reed

President/General Manager

year Reed



Stephen P. Lesko Executive Director

July 3, 1997

Robert Wilson, President Anchorage Amateur Radio Club P. O. Box 101987 Anchorage, AK 99510-1987

Dear Bob:

It is with great appreciation that Hope Cottages and its board of directors acknowledge your club's generous \$1,000 contribution towards the support services that we provide Alaskans who experience developmental disabilities. With the moral and financial support of community spirited organizations such as yourselves, Hope is able to continue providing quality, progressive residential and supported employment opportunities in Anchorage and throughout Alaska.

Hope presently provides assistance to almost 600 Alaskan children and adults, however, there are over 1,000 individuals and families that are on the state's "waiting list" for services. Hope has committed to maintain the level of support to not only those already receiving its services, but also to providing assistance to families on the waiting list; so that their children can remain at home and in their community of choice with their parents and love ones.

Thanks again for your generosity and for helping us help Alaskans with developmental disabilities. And, of course, your traditional volunteer efforts with the Walk for Hope has proven invaluable.

Sincerely,

Corbett R. Mothe Administrator

Public Relations &

Resource Development



#### ALASKA PACIFIC UNIVERSITY

#### Office of the President

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June 20, 1997

Mr. Robert Wilson Anchorage Amateur Radio Club PO Box 101987 Anchorage, AK 99510-1987

Dear Robert:

I want to personally thank you for your generous contribution to Alaska Pacific University. We have had an excellent year, which has included significant increases in enrollment and general well-being.

I just learned yesterday that APU has been selected as one of just 93 colleges and universities in the nation (a total of 3,600) to receive the Critical Comparisons of American Colleges and Universities' "Good Work" Award for combining excellence in education with reasonableness in price.

We couldn't continue to have such success without the help of friends like you.

I am especially grateful to the continued support of the Anchorage Amateur Radio Club. Would you perhaps like it if I gave a little talk to your group one of these times when you meet here. I would enjoy doing it. Give me a call if you are interested.

Sincere thanks,

Douglas MNorth



## The Salvation Army Alaska Divisional Headquarters

Mailing Address: P.O. Box 101459 143 E. Ninth Avenue · Anchorage, Alaska 99510-1459 (907) 276-2515 · FAX (907) 276-1424 Founded in 1865
By William Booth
Paul A. Rader
General
Peter H. Chang
Terntonal Commander
Harold F. Brodin
Divisional Commander

July 1, 1997

Mr. Robert Wilson, President Anchorage Amateur Radio Club P. O. Box 101987 Anchorage, AK 99510-1987

Dear Mr. Wilson:

Thank you for your generous gift of \$1,000 to The Salvation Army. We appreciate your support, which will be of great help as we continue to meet the needs of people who depend on The Salvation Army in times of crisis.

We are deeply grateful that the Anchorage Amateur Radio Club has chosen to offer its assistance to those who are less fortunate. It is always gratifying when our friends respond to the urgent needs of their fellow Alaskans, and your generosity will help us provide food to hungry families and touch suffering lives in a very practical way.

The generous support provided by the Anchorage Amateur Radio Club and other local businesses and organizations is crucial to The Salvation Army's ability to continue its work in Anchorage. We appreciate all the encouragement and support that you offer and look forward to your continuing involvement with the Army in Alaska.

Sincerely,

Harold F. Brodin, Major

DIVISIONAL COMMANDER

HFB:lm

### **HALO Rocket Balloon**

Updated May 15 2:00 pm:

#### Flight Story:

The HALO team met at the launch site in Hampstead, NC in the wee hours of Sunday morning, May 11th. It was very cold (frost collected on the equipment) with absolutely no wind. Perfect conditions for a balloon flight! As the rocket crew tested out the payload and command electronics and fueled the rocket with nitrous oxide, the balloon crew unfurled the delicate plastic envelope on the protective ground tarp, attached the Kjome launcher and started the inflation process.

As the sun poked up above the horizon, and with just 30 minutes to go before our FAA launch window closed, we ran across 2 nearly empty tanks of helium. Concerned that we would not have enough helium in the balloon to lift the rocket payload, we searched Hampstead and nearby Topsail Beach for helium (not an easy task early on Saturday morning). It turned out the local Food Lion store had two tanks they used for party balloons and sold them to us. This saved the day and allowed us to achieve final flight lift. The rocket crew lifted the payload and stretched the lines tight, the fill tube on the balloon was tied off and the call to the FAA went out for imminent lift off. With just 5 minutes to go before the deadline, we released the balloon at 6:59 am EDT and the rockoon headed up smoothly into the still morning sky on its way to the stratosphere.

Spectacular color video of the balloon and the side of the rocket launch tube could be seen in the command tent. The rocket video was viewable on another monitor, but little could be seen due to the protective plastic wrap around the gondola.

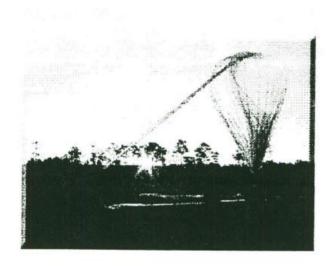
The GPS telemetry downlinked via packet radio in APRS format started to get weak after the rockoon exceeded 23,000 feet. The signal faded completely into the noise and we unable to record any more usable position and altitude reports from that point onward. We think that the internal antenna for the packet transmitter put most of the radio signal up and down, but very little signal made it towards the horizon as the payload headed out nearly 120 miles out over the Atlantic.

At 8:21 am, we were calculated the estimated altitude of the rockoon based on the ascent rate to be around 60,000 feet. I said, "Since we are now above 49,000 feet, the barometric rocket safety switches are now armed and the rocket can be fired at anytime." Of couse, we were hoping to reach at least 100,000 feet before firing off the rocket. Just 30 seconds later, I happened to be looking at the video of the balloon envelope and thought that the balloon looked pretty full. Just then, one of the seams tore wide open, dumped out all of it's helium and the balloon just folded up into a long streamer of plastic! As the rocket and gondola dropped rapidly, I shouted out to Ed KE4ROC, "Fire that rocket NOW!". We had just over a minute to issue the fire command before the safety switch disarmed the rocket at 49,000 feet.

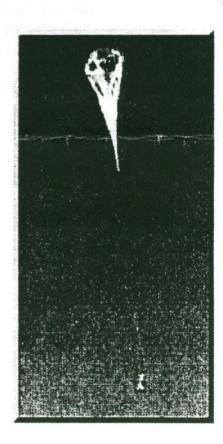
Ed keyed down the 2 meter transmitter and anxiously entered the firing code via touchtones. Nothing happened...He tried another time...nothing...and then a third (we had only seconds left before the safeties cut in). All of a sudden there was a bright flash and a cloud of smoke and the rocket leaped out of the gondola and off towards space. Bits of plastic tape and the plastic covering shredded off and fluttered past the camera view as the gondola continued its rapid descent. Miracously, the camera had survived the rocket exhaust blast and continued to work flawlessly until the gondola splashed into the Atlantic Ocean.

We were treated to flashes of video from the rocket for about 30 seconds showing tantalizing views of the curve of the Earth. Since the rocket was spinning around, the ATV signal fluttered in and out and made it difficult to lock onto a good picture. After that, the video signal ceased and the rocket parachuted down into the Atlantic. We estimate our peak altitude at 38 nautical miles. Both the gondola and the rocket splashed down about 120 miles east of the launchsite and 50 miles from the nearest land. Since the GPS signals were unavailable, we were unable to direct the chase boat to an accurate splashdown location. The rocket and gondola were very small straws in an extremely large haystack and as a result, the chase boat did not recover the payloads.

Although we did not achieve space (defined as 51 nautical miles in altitude), we did set several records: The first amateur launch of a rockoon (rocket launched from a balloon), the highest launch of a hybrid rocket (hybrid referring to the nitrous oxide/asphalt fuel combination), and the highest flying hybrid rocket to date. (de Bill Brown WB8ELK)



Taken from: AMSAT Homepage. <a href="http://www.amsat.org">http://www.amsat.org</a>



#### The Anchorage Amateur Radio Club News

#### Anchorage Amateur Radio Club, Inc.

Post Office Box 101987 Anchorage, AK 99510-1987 Bulk Rate U.S. Postage PAID Anchorage, AK Permit No. 223

Roger Hansen KL7HFQ L036
POB 520343
Big Lake AK 99652-0343

#### TECH-TIP

Not too long ago I had occasion to do soldering work on a copper-wire dipole that had been out in the weather for years. It had aquired the usual greenish discoloration and corrosion. In spite of considerable effort, solder just would not stick to it. I gave some consideration to giving the whole stinking mess a toss into the trash but then remembered a tip I had read somewhere. It said to take ordinary household vinegar and add to it as much salt as it would dissolve, then to brush the mixture to the copper or dunk the wire into it, whichever is easier. I tried it. It works!!! Water washes away all the residue.

After about five minutes the wire had turned to a bright copper color and would now take to solder readily. I believe this would work as well for copper plumbing. I have found this works great on cleaning other metals as well, like gold.....and gold jewelry!....try it!....seeing is believing.....and it won't hurt or "etch away the metal" at all. It is just amazing what it does to raw placer gold, fresh from the river with a multi-centuries old coating of tarnish. The glow of the metal comes forth with little effort, and the corrosion goes down the drain.

For those who are not convinced: reach into your pocket and pull out the worst-case, totally mucked up and corroded copper penny. Dump it into the vinegar-salt mix and see what happens....! Stop struggling to solder old copper.....give it the treatment first!!!

73 & GL Marshall, KL7EU Northern Lights ARC

Marshall